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EXAMINER

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/679,391
Filing Date: October 03, 2000
Appellant(s): BATES ET AL.

MAILED

OCT 27 2006

Technology Center 2600

John S. Paniaguas

For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed October 11, 2006 appealing from the Office action mailed June 14, 2004.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

No amendment after final has been filed.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

6,198,883	RANGAN et al	3-2001
6,205,231	ISSADORE-BARRECA et al	3-2001

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 31-36 are anticipated by RANGAN et al under 35 U.S.C. 102(b). Claims 37-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over RANGAN et al in view of ISSADORE-BARRECA et al.

(10) Response to Argument

Appellant argues that Rangan clearly does not suggest or disclose the following elements of claims 31 and 32 as well as claims 33-38. Claim 31 recites in combination, a method which includes a step of determining the location where an action by a pointing device has occurred.

Responding to appellant, first, examiner cites column 3, lines 29-64 of Rangan, in particular lines 29-34 referring to a graphical user interface (GUI) usable by an editor for selecting, centering, and initiating a tracking element (as per the previous FINAL Office Action). The GUI means (the pointer means) is also disclosed at column 7, lines 34-52, which describe a tracking element placed over an image entity to be tracked.

Regarding claim 31, appellant further argues that Rangan does not provide the step of determining a color value with the selected location and automatically associating an event with the color value in succeeding video frames.

Rangan discloses at column 3, lines 35-44 the equivalent of the step of determining a color value with the selected location and automatically associating an event. Further, column 4, line 66-column 5, line 20 discloses initiation of tracking of any image entity or entities in a video stream, after which initiation tracking may be automatic, wherein appropriate coordinate tracking data associated with the image

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entity or entities is provided and synchronized. The image entities are directly related to the events. The image entities "[are] meant [to be] any person or thing depicted in a video display, such as a player in a sports game, and actor in a play, a car in a car race, and so on" (column 5, lines 8-10). The final limitation of claim 31, automatically associating an event with said color value of said selected location in said one video frame and automatically associating events with said color value in succeeding video frames, is also anticipated by Rangan. Rangan discloses analogous processes at column 4, lines 20-32 with color values of the signature pixels in a first frame. Rangan further discloses a test function for determining the color signature of the signature pixels at the assumed position and at a plurality of test positions in the immediate vicinity of the assumed position wherein the pixel signature most closely matches the image signature. The succeeding frames are analogous with the assumed positions and plurality of test positions in the immediate vicinity of the assumed position, as described by the FINAL Office Action. Further still, column 4, lines 32-35 disclose frame by frame processing representing the succeeding video frames.

To underscore the disclosure relating to the color values associated with the succeeding video frames, column 7, lines 7-52 disclose not only frame by frame tracking coordinates of a swim suit, but also disclose an editor selection process using well-known cursor techniques (drag and drop, click-on etc.). Further disclosed is a tracking element directly associated with pixel values associated with a target number and spatial arrangement of pixels that are directly associated with the size and shapes of the swim suit. Therefore, the "event" is analogous with the swim suit that has a size

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and shape associated with signature pixels /color signature that is tracked from one position (frame) to a plurality of positions in the immediate vicinity of the assumed position (frame or first frame). Finally, refer to appellant's Specification, notably, pages 14-15 beginning with Event Processing. The green shirt worn by the host is the center of focus, specifically, on page 15, lines 6-9. The green shirt and the swim suit are analogous because the moving green shirt may initiate events and similarly, the swim suit disclosed above may initiate events.

Examiner notes that applicant argues matter not claimed, regarding the "extremely computation-intensive" invention of Rangan (please see RESPONSE TO ARGUMENTS of the FINAL Office Action). In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "extremely computation-intensive"/arduous task invention of Rangan) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Also, the "open-ended" recited claim language of applicant (use of comprising rather than consisting of, for example) allows use of Rangan applied to the instant invention. In other words, Appellant has chosen not to define the processing steps so that Rangan, being more arduous and computationally extensive, would not anticipate the subject matter of the claim language. However, because appellant failed to adhere to the suggestion to amend the open-ended claim language using "comprising" to a

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more narrowly interpreted use of "consisting", Examiner maintains use of Rangan anticipating claims 31-32.

Appellant further argues claims 34-38, and of these claims, claims 35 and 36 are similar to claim 34, but relate to a color pattern, and claims 37 and 38 are similar to claim 34, but relate to an edge of a selected object.

Claim 34 recites a system in which the locations of an object selected by a pointing device are determined. This claim also recites determining a color range for the selected object and associating an event with the color range in succeeding video frames. Rangan discloses the means of a pointing device as described above. As per the color range disclosed in claim 34, the FINAL Office Action cited column 3, lines 29-64, specifically noting lines 35-44, wherein "a test function for determining the color signature of the signature pixels..." is representative of the color range in the recited claim language. Further, the color range is analogous to the color signature of the signature pixels disclosed by Rangan with the swimsuit (column 7, lines 7-52 and column 8, lines 40-52). The event associated with the color range, as recited by the claim language, is analogous to the swimsuit of the diver moving from one immediate position to another in Rangan. Movement from one immediate position to another is representative of succeeding frames.

Claims 35 and 36 are similar to claim 34 but relate to a color pattern, rather than a color range. Appellant has not properly distinguished the color range from the color pattern in the claims, nor has appellant provided separate definitions for the terms in the

specification. Thus, the arguments against appellant that apply to claim 34 can also apply to claims 35 and 36.

Appellant's arguments are further directed to dynamic tracking (line 9 of page 6) and continuous color pattern (line 16 of page 6). In response to appellant's argument that the references fail to show certain features of appellant's invention, it is noted that the features upon which applicant relies (i.e., dynamically tracking and continuous color pattern) are not recited in the rejected claim(s) (please see the RESPONSE to ARGUMENTS section of the FINAL Office Action). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Appellant further argues that Rangan's color signature records the color value of every value in a fixed area rather than detecting a color pattern based on a region of interest. However, it is not disclosed how the recording of color values is distinguished from the detection of a color pattern. Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

Further, appellant's argument on page 6 of the Appeal Brief on lines 8-9 is not convincing because nowhere within the recited claim language of claims 31-32 and 34-36 (nor 37-38) does appellant define an object based on its color. Appellant points out on lines 14-18 of page 6 that "This testing requires significant data to be computed at each frame". Appellant posited a similar argument, which examiner addressed in the

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FINAL Office Action, wherein, appellant stated "Such a process is extremely computation-intensive-much more computation than the system recited in the claims at issue". Appellant still argues subject matter that is not claimed. Examiner suggested that appellant amend claim language removing comprising (open-ended claim language) with more precise claim language, for example, using consisting of, or possibly claiming successive steps, etc., but as the claims stand presently, they are not limited to performing *only* the steps in the claim.

Regarding claims 37 and 38, appellant posits a similar response (see lines 5-8 on page 7), by again arguing subject matter not recited in the claim language. For example, appellant argues that nowhere does Rangan disclose or suggest tracking an object based solely on its color nor does it dynamically change the shape and size of the object based on color. Lines 7-8 are argued only and not represented in the claim language. Once again, because appellant has chosen to use open-ended claim language, Rangan discloses the recited claim limitations. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Further, appellant argues that the edge detection means disclosed by Issadore-Barreca would not be compatible with the fired wire frame tracking method taught by Rangan. Appellant argues a failure to establish a prima facie case of obviousness as set forth in MPEP sections 2142 and 2143.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by

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combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, both Rangan and Issadore-Barreca references share similar technological environments corresponding to the processing of moving video images, and Issadore-Barreca adds motivation of better identifying and tracing an object (see abstract).

Further, in response to applicant's argument that the references are not compatible, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985). Moreover, appellant argues that motivation to combine the two references was not based on the subject matter of the two references (see page 7, lines 24-28). In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). In this case, motivation to combine was found in Issadore-

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Barreca, that motivation being to better identify and trace an object, as recited in the previous FINAL Office Action.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

On pages 7-8, appellant states that "...all of the claims recite automatically associating an object with its color in a plurality of video frames. None of the references cited disclose such an automatic authoring system. Moreover, there is no reasonable expectation that the combined references would succeed in an interactive TV application."

Here, appellant again argues subject matter that is not recited in the claim language by discussing an interactive TV. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Secondly, column 4, line 66-column 5, line 20 of Rangan clearly discloses automatically tracking element/image 29 entities in a video presentation. The swimsuit worn by the diver has a color range/color pattern (i.e. signature pixels) and each signature pixel has a known value for R, G, and B. (column 8, lines 40-52) from the video.

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(11) Related Proceeding(s) Appendix

There are no related proceedings.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Examiner Aaron Richer

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(Examiner's Answer substantially written by Examiner Anthony Blackman.)

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